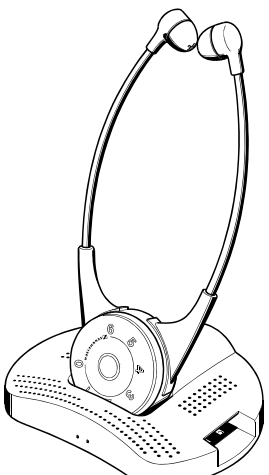
Set 820

Bedienungsanleitung
Instructions for use
Notice d’emploi
Instrucciones para el uso



Set 820

Thank you for choosing Sennheiser! Over 60 years of accumulated expertise in the design and manufacture of high-quality audio equipment has made Sennheiser a world leader in the field of audiology.

The Set 820 is an assistive listening system for your radio, TV, hi-fi system or similar sound sources at the volume you choose. The transmitter has a range of up to 100 ft which allows you to move around freely – without the constrictions of cables. The system uses RF audio signals for sound transmission.

WARNING: **Volume up? - No!**

When people use headphones, they tend to choose a higher volume than with loudspeakers. However, if your hearing has deteriorated and you need to rely on an assitive listening system, please avoid listening at high volume levels for a long time. Please protect your hearing.

ATTENTION: **Danger of short circuit!**

Neither transmitter nor receiver must get wet or excessively moist, e.g. due to spilled liquids or use in damp rooms.
Do not short circuit the contacts of the rechargeable batteries!

ATTENTION:

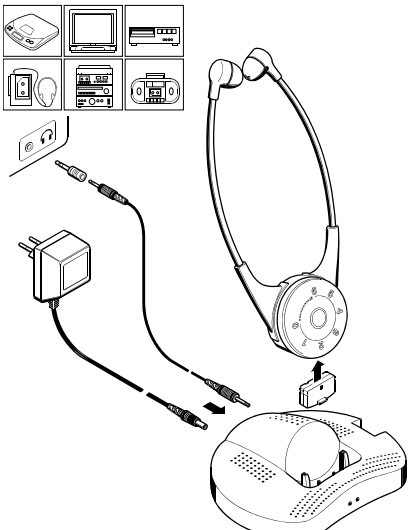
Components from other manufacturers (e.g. for power supply or battery) may cause damage to the unit and will invalidate the warranty.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operations is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, indcluding interference that may cause undesired operation.
FCC ID: DMOUSC820
IC: 2099A-USC820

Delivery includes

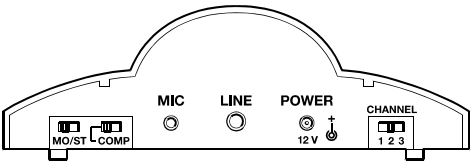
The Set 820 consists of the following components and accessories:

- Stethoset receiver RR 820
- Transmitter (charging unit) TR 820
- Rechargeable battery BA 151
- Power supply NT 820
- Connecting cable for headphone output
- Adapter for RCA socket
- Microphone MKE 800 TV
- Replacement ear pads
- Instruction manual
- Quick Instructions



Connecting the transmitter (charging unit)

The rear of the transmitter is fitted with two audio inputs: A socket (LINE) for connection to the LINE OUT socket or the headphone socket on your TV, and a microphone socket (MIC).



Plug in one end of the connecting cable to the LINE OUT socket or the headphone socket on your TV, and the other end to the LINE socket on the transmitter.

If your TV does not have a headphone or RCA socket, you can use an external microphone which is described in the section ‘‘Accessories’’.

Only use one of the two audio inputs on the transmitter (MIC or LINE).

Connect the power cable to the POWER socket on the transmitter. Plug the power supply into a household electrical outlet.

Pull the power supply unit out of the electrical outlet when the unit will not be used for extended periods of time.

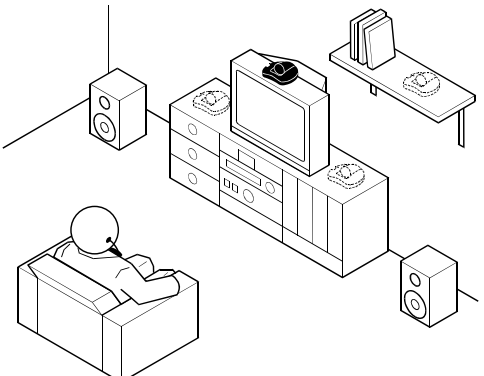
Complete freedom of movement

It is not necessary that the transmitter and stethoset receiver are in a direct line of sight, so you can move around freely in the home or outside in the garden. One transmitter can be used to transmit to several receivers on the same frequency. The transmitter's range may decrease due to the surface/composition of walls.

Where to place the transmitter

Choose a suitable place near or on top of your hi-fi system or TV set.

Do not place the transmitter close to metal objects such as shelf bars, reinforced concrete walls, etc.



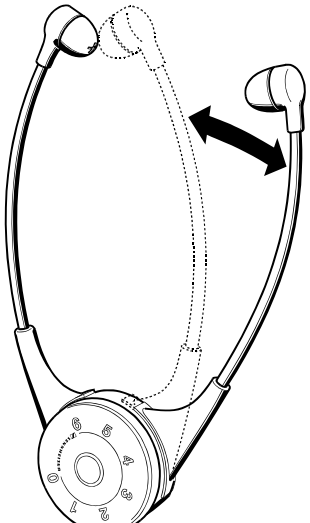
The transmitter features a convenient automatic on/off function. The transmitter is turned on by the audio signal.
If there is no audio signal for about 3 minutes, the transmitter automatically turns off. The transmitter is now in stand-by mode, its power consumption is very low so that it can remain connected to the mains. Batteries can always be recharged when the transmitter is connected to the mains.

Using the stethoset receiver

When putting the stethoset receiver on, make sure the operating control is pointing downwards and the letters are at the front.

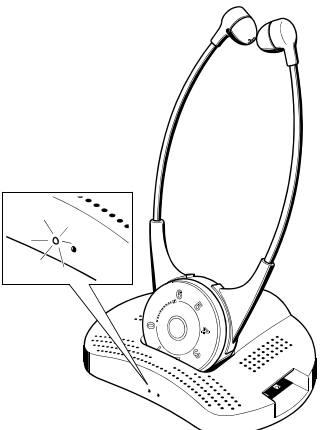
The stethoset receiver automatically turns on if you pull the earbows apart.

After use, the receiver automatically turns off.



Charging the battery

Place the receiver into the transmitter's charging compartment, with the operating control at the front. The left LED on the transmitter must light up.



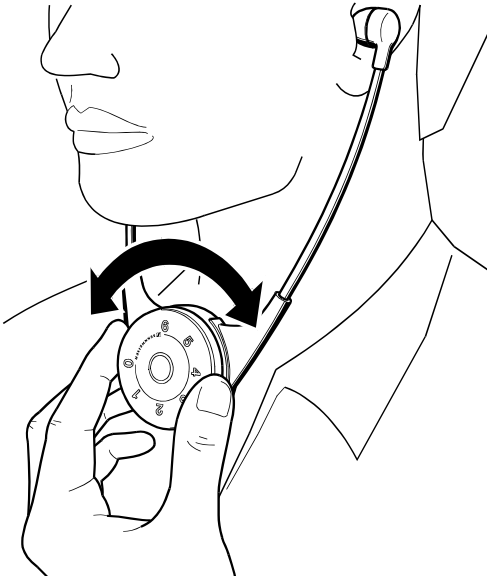
Charge the battery for 24 hours before you use it for the first time. The normal charging time is 4-5 hours. A fully charged battery has an operating time of approx. 4 hours.

Always store the receiver on the transmitter to ensure that it is fully charged. The transmitter automatically switches to trickle charging so that the battery cannot be overcharged. The receiver can remain in the charging compartment even when the battery has been fully charged.

Adjusting the volume

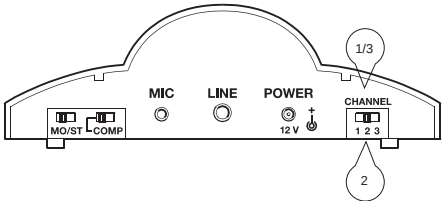
Adjust the receiver's volume with the operating control.

If you are not using the stethoset receiver, store it in the transmitter's charging compartment so that the battery can be recharged (see section "Charging the battery").



Changing the transmission channel

To avoid interference caused by the simultaneous operation of several transmitters, select a different channel on each transmitter. Several switchable transmission channels are available (CHANNEL).
Due to the required approval two channels are selectable:
Positions 1 or 3 = channel 1 Position 2 = channel 2

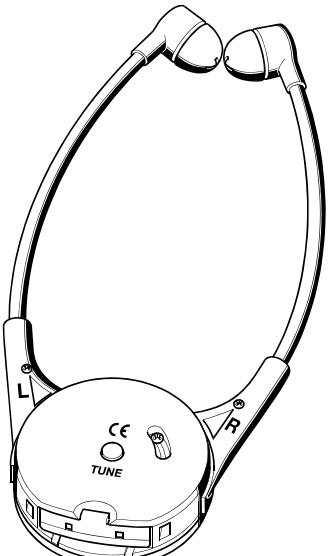


Turning the automatic compression system on

Use the COMP switch (compression) at the rear of the transmitter to turn the automatic compression system on. This system reproduces soft passages louder and decreases loud sounds.
Use the MO/ST switch to choose between mono and stereo transmission. For mono TVs and when using the MKE 800 TV microphone, the switch must be set to mono (MO).

Adjusting the receiver channel

First turn on the transmitter (see section ''Where to place the transmitter''). Then put on the stethoset receiver - as soon as the receiver is put on it automatically tunes itself to the first strong signal found (normally the transmitter frequency). If, for some reason, the selected channel is not the correct one (e.g. because of interference or another nearby system), press the TUNE button at the rear of the receiver until you can hear the audio signal loud and clear. If you decide to change the transmitter channel, the frequency search tuning must be re-started by pressing the TUNE button on the receiver again (see section ''Changing the transmission channel'').



Additional information

The audio transmission technology used with this unit is basically that of a radio. According to today's scientific knowledge, the radio waves emitted by this unit are not harmful to humans or animals.

Varnish or furniture polish may degrade the rubber feet of the transmitter. Place the transmitter on a nonslip pad to avoid potential staining of furniture.

Delivery includes a pair of replacement ear pads. If necessary, remove the old ear pads and slide on the new ones.

Use a soft cloth for cleaning the units. Do not use abrasive cleaners.

Accessories

Only use original Sennheiser spare parts and accessories.

The following accessories are available from your authorized dealer:

Rechargeable battery	BA 151
Charger	L 151-2
Stethoset receiver	RR 820
Clip-on receiver with audio socket	RR 820 S
External microphone	MKE 800 TV
Replacement ear pads	

BA 151 rechargeable battery
By using a spare battery, you can use the stethoset receiver for more than four hours of continuous operation. Always store the spare battery in the small charging compartment at the right of the transmitter. The right LED on the transmitter lights up green to show charging is taking place. When charging a battery in the small charging compartment, the charging time is 10-12 hours.

A battery has a service life of 1-2 years and should be replaced if the operating time decreases.

Sennheiser batteries can be recycled. Please dispose of the batteries as special waste or return them to your specialist dealer. To protect the environment, only dispose of totally exhausted batteries which cannot be recharged.

L 151-2 charger
Spare batteries can be charged via the L 151-2 charger.

RR 820 stethoset receiver
One transmitter can transmit to several receivers. Additional RR 820 receivers are available from your authorized dealer.

RR 820 S clip-on receiver
Instead of earbows, this receiver features a socket for connecting a headphone or a connecting cable which allows its use with a hearing aid.

MKE 800 TV external microphone
If your TV doesn't have a headphone output or RCA socket, you can use your Set 820 together with the MKE 800 TV microphone.

Fix the microphone to the loudspeaker of your TV by means of Velcro tape. Connect the microphone connector to the MIC socket on the transmitter and set the transmitter's MO/ST switch to mono (MO).

If problems occur...

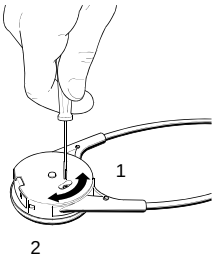
- Are all jack plugs connected correctly?
- Are the receiver and sound source turned on and is the volume of the
- receiver and sound source sufficient?
- Have you pulled the earbows apart?
- Is the battery inserted properly into the receiver?
- Have you charged the battery for at least 20 minutes?
- Are you too far from the transmitter? (if so, move closer)
- Choose a different channel.
- Adjust the setting with the TUNE button.
- Should the problem persist, please contact your authorized dealer for assistance.

Never open the unit!

Additional information for hearing aid acousticians

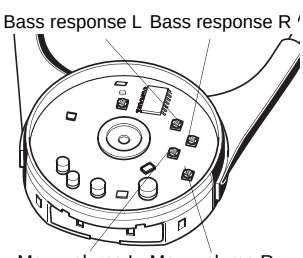
Adjusting the earbow pressure

Loosen the screw at the rear of the stethoset receiver.
Move the screw in the long hole to the desired position (continuously adjustable).
1 = Low earbow pressure
2 = High earbow pressure
Tighten the screw.



Adjustments for hearing disabilities

Turn the operating control fully counterclockwise (0). Remove the operating control by carefully lifting it over the "guide notch" on the inside. Use the 4 potentiometers on the circuit board to individually adjust the max. volume and the bass response for the left and right headphone system.



Adjusting the max. volume:

Potentiometer turned fully counterclockwise	0 dB
Potentiometer turned fully clockwise	125 dB

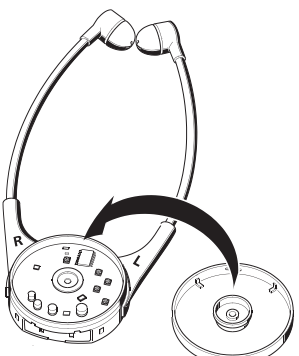
Adjusting the bass response:

Potentiometer turned fully counterclockwise	attenuation of -25 dB at 100 Hz
Potentiometer turned fully clockwise	attenuation 0 dB

The adjustments can also be made when the receiver is being used.

When replacing the operating control, make sure the "projections" on the inside of the operating control point in the direction of the earbows.

After replacing the operating control, synchronize the operating control with the volume control by once turning it fully counterclockwise and then fully clockwise.



Technical data

Modulation	FM, stereo
Carrier frequencies	see type plate at the base of the transmitter
AF frequency response	40 Hz ..... 15 kHz
S/N ratio	60 dB A rms

Transmitter

RF output power	typ. up to 0,75 mW
Audio input	0.14 inch jack, stereo/mono
Microphone socket	1 inch jack, mono
Charging time for battery	approx. 4 h
Charging time (spare battery)	approx. 10-12 h
Power supply	12 V DC via NT 820 mains unit
Power consumption	typ. 55...89 mA, depending on batterie charge state
Weight	approx. 94 g (without battery)
Dimensions	diameter: 5.9 inch, heigth: 1.9 inch

Receiver

Max. sound pressure level	> 125 dB
Power supply	2.4 V via BA 151 battery
Power consumption	typ. 20 mA
Operating time	more than 4 hours per battery
Weight	approx. 60 g (without battery)
Dimensions	length: 9.0 inch, width: 4.9 inch, heigth: 1.0 inch

Manufacturer declarations

CE Declaration of Conformity

This equipment is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 89/336/EC or 73/23/EC. The declaration is available on the internet site at www.sennheiser.com.
Before putting the device into operation, please observe the respective country-specific regulations!

WEEE Declaration

Your Sennheiser product was developed and manufactured with highquality materials and components which can be recycled and/or reused. This symbol indicates that electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.
Please dispose of this product by bringing it to your local collection point or recycling centre for such equipment. This will help to protect the environment in which we all live.

Batteries

The supplied rechargeable batteries can be recycled. Please dispose of rechargeable batteries as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of exhausted batteries.

Statement required by FCC rules Part 15 and RSS 210

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subjected to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this equipment not expressly approved by Sennheiser electronic GmbH & Co. KG may void the FCC authorization to operate this equipment.

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